# Racial/Ethnic Disparities in Patient Safety Indicators in Massachusetts

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#### RESEARCH OBJECTIVE

The Urban Institute finds disparities in patient safety indicator (PSI) rates between Black and white patients nationwide. We wanted to know if there are racial/ethnic disparities in PSI rates in Massachusetts, and if disparities persist when controlling for individual patient and hospital characteristics.

### **METHODS**

**Data source:** Hospital discharge data collected by the Massachusetts Center for Health Information and Analysis

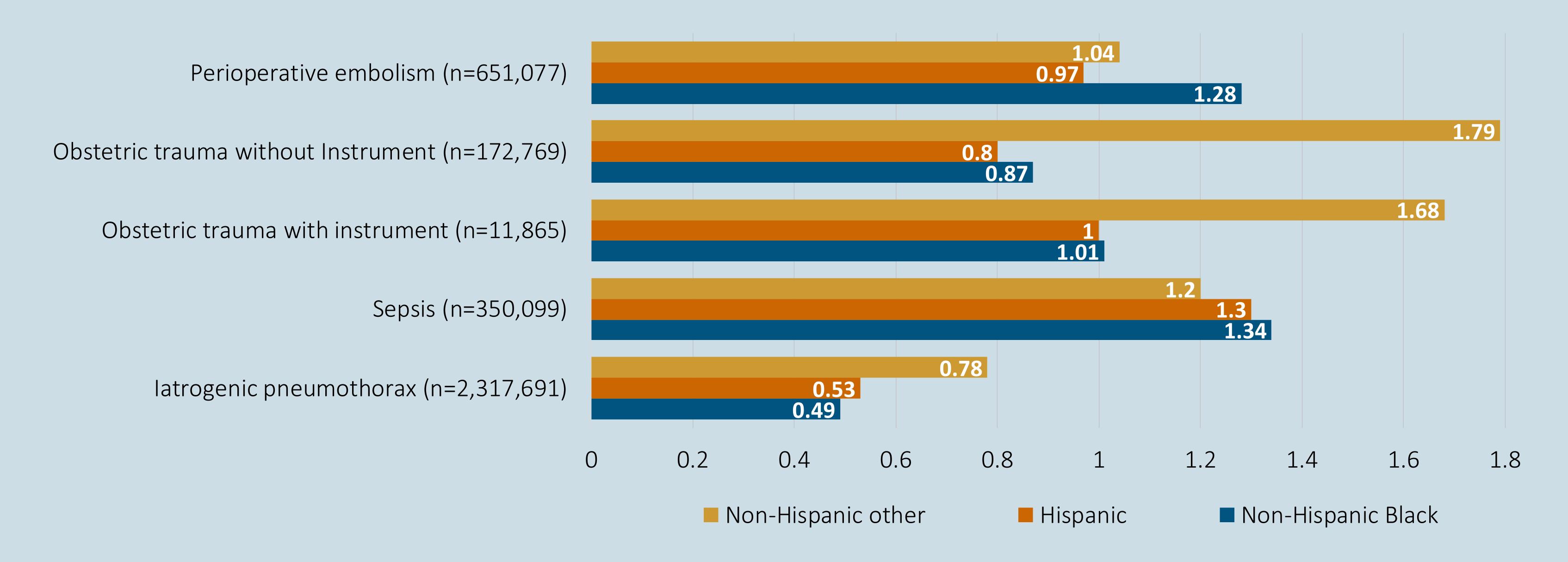
**Study population:** Patients at risk of PSI between 2015-2019 in Massachusetts

# **Analysis:**

- 1. Identified PSIs
  - Used AHRQ algorithm (avoidable patient safety event in acute care)
- 2. Race/ethnicity predicts PSI
  - Used logistic regression
- 3. Does race/ethnicity remain significant when controlling for individual risk adjusters and hospital quality?
  - # of PSIs the hospital is above the state median on

# Racial/ethnic disparities identified in 6 out of 13 surgery and obstetric patient safety indicators

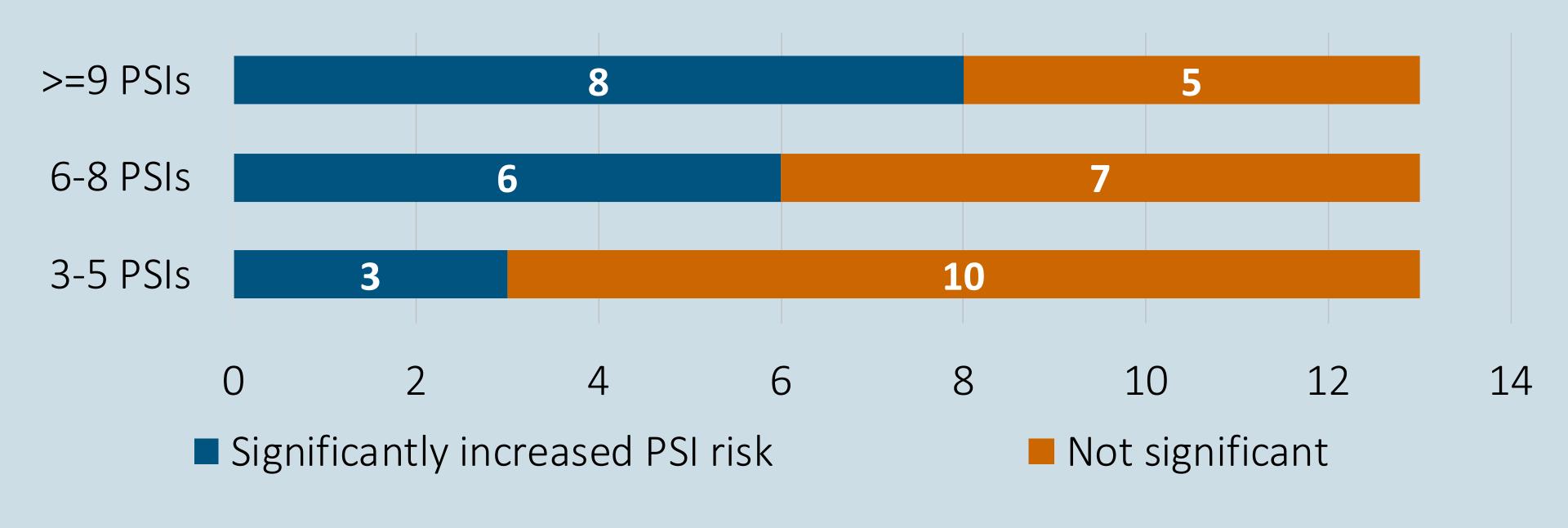
- Non-Hispanic Black patients are at increased risk of sepsis and perioperative embolism
- Hispanic patients are at increased risk of sepsis
- Non-Hispanic other patients are at increased risk of obstetric trauma and sepsis



Non-Hispanic white=reference group. Models include individual risk factors of age, sex and insurance status and hospital characteristics of % patients privately insured, % non-Black, Hispanic or other patients, number of PSIs hospital is above the state median on (ref=<2 PSIs) and hospital random effect.

# Hospital quality more consistently predicts risk of patient safety indicators

Patients in hospitals above the state median on >=9 PSIs are at increased risk for 8 out of 13 PSIs compared to patients in hospitals above state median on <=2 PSIs.



#### CONCLUSION

- Individual race/ethnicity increases the odds of experiencing some surgery and maternal safety events.
- Hospital quality consistently increases odds that an individual will experience a PSI.

# POLICY IMPLICATIONS

Implicit bias collaboratives in patient safety events

Learning Decrease in patient safety events

# CONTACT

Scan the QR code to download a digital copy of this poster. For more information, email <u>Julia.Prentice@BetsyLehmanCenterMA.gov</u>



# REFERENCES

- 1. Anuj, Gangopadhyaya. 2021 "Black Patients Are More Likely Than White Patients to Be in Hospitals with Worse Patient Safety Conditions." Urban Institute.

  <a href="https://www.urban.org/research/publication/black-patients-are-more-likely-white-patients-be-hospitals-worse-patient-safety-conditions">https://www.urban.org/research/publication/black-patients-are-more-likely-white-patients-be-hospitals-worse-patient-safety-conditions</a>
- 2. Anuj, Gangopadhyaya. 2021 "Do Black and White Patients Experience Similar Rates of Adverse Safety Events at the Same Hospital?" Urban Institute. <a href="https://www.urban.org/research/publication/do-black-and-white-patients-experience-similar-rates-adverse-safety-events-same-hospital">https://www.urban.org/research/publication/do-black-and-white-patients-experience-similar-rates-adverse-safety-events-same-hospital</a>